

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP 2004/014873**A. CLASSIFICATION OF SUBJECT MATTER**Int.Cl⁷ **H01L33/00, H01S5/343**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ **H01L33/00, H01S5/00-5/50**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2004, Japanese Registered Utility Model Gazette 1994-2004, Japanese Gazette Containing the Utility Model 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-043618 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD)	1-4, 6, 8-11, 19-21, 27-29
Y	2002.02.08, [0058], [0064] - [0098], Fig. 3 (Family:none)	12-18, 22, 30
Y	JP 2003-229645 A (NIHON DENKI CO., LTD.)	12-18
	2003.08.15, [0038], [0040] - [0061] & WO 2003/065526 A1	
Y	JP 2001-102629 A (NICHIA CORPORATION)	12-18
	2001.04.13, [0009], [0033] - [0054] (Family:none)	
Y	JP 2002-133925 A (SANKEN ELECTRIC CO., LTD.)	22, 30
	2002.05.10, all pages, all figures (Family:none)	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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Date of the actual completion of the international search

15.12.2004

Date of mailing of the international search report

11.1.2005

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